

**HIGH-SPEED IMAGE PICKUP METHOD AND CONTROLLER  
FOR IMAGE PICKUP DEVICE**

Abstract of the Disclosure

5        A high-speed image pickup method and controller of an image pickup device  
are provided. The method includes applying a vertical transmission signal to a  
vertical transmission register in the form of a field transmission signal, thereby  
simultaneously transmitting charges accumulated at a plurality of pixels to the  
vertical transmission register; applying the vertical transmission signal to the vertical  
10      transmission register in the form of a line transmission signal, thereby transmitting a  
charge signal corresponding to each horizontal line in the vertical transmission  
register to the horizontal transmission register at a high speed, and applying a  
horizontal transmission signal to the horizontal transmission register, thereby  
outputting the charge signal of the horizontal transmission register; transmitting the  
15      charge signal of the vertical transmission register to the horizontal transmission  
register at a normal speed when a horizontal line of which the charge signal is  
transmitted is a first horizontal line, and applying the horizontal transmission signal to  
the horizontal transmission register, thereby outputting the charge signal of the  
horizontal transmission register; and transmitting the charge signal of the vertical  
20      transmission register to the horizontal transmission register at the high speed when a  
horizontal line of which the charge signal is transmitted is a second horizontal line,  
and applying the horizontal transmission signal to the horizontal transmission  
register, thereby outputting the charge signal of the horizontal transmission register.  
Accordingly, the high-speed image pickup method and controller can realize high-  
25      speed image pickup using a normal image pickup device instead of using a special  
high-speed image pickup device.